NHDOT SPR2 PROGRAM
RESEARCH PROGRESS REPORT

Project # 26962R		**Report Period** Year □ Q1 (Jan-Mar) □ Q2 (Apr-Jun) □ Q3 (Jul-Sep) X Q4 (Oct-Dec)
Project Title: Active Transportation Accounting: A three-pronged approach to developing metrics for project prioritization, monitoring, safety assessment, and evaluation		
Project Investigator: Amy Villamagna **Phone:** 603-535-2217		**E-mail:** amvillamagna@plymouth.edu
Project Start Date: Dec 1, 2016	**Project End Date:** March 31, 2018	**Project schedule status:** On schedule □ Ahead of schedule XBehind schedule** ***We have added tasks into the project that the TAG deemed valuable and request a no-cost extension to complete the project.*

Brief Project Description:

This project will leverage *a)* existing datasets (participatory mapping of facility activity through the Strava App), *b)* statewide on-the-ground bike-ped monitoring initiatives (conducted in partnership with the 9 regional planning commissions in NH) (Tufts et al. 2015), *c)* efforts to develop and apply a Level of Traffic Stress (LTS) model for bicycling (MTI Report II-19), and incorporate novel public participatory GIS approaches to assess patterns of current bicycle activity and identify potential barriers to access and participation.

Progress this Quarter (include meetings, installations, equipment purchases, significant progress, etc.):

- Continued LTS model tool development
- LTS model tool user guide
- Analyzed LTS full and lite model values side by side to highlight differences. A suite of maps will be shared with TAG partners.
- Created ArcGIS Online webmap application to gather feedback on the LTS "full" and LTS "lite" modeled values across the state. We will share beta version of this application will be shared with TAG members for feedback before launch. The goal is to share it with as many people across the state as possible. https://plymouthstate.maps.arcgis.com/apps/webappviewer/index.html?id=633223a8e5b348f09da3873d3c26f62f
- Conducted preliminary literature review of Walkability assessments and metrics.

Items needed from NHDOT (i.e., Concurrence, Sub-contract, Assignments, Samples, Testing, etc…):

TAG meeting will occur March 15, 2018 via conference call.

Anticipated research next 3 months:

- Finalize GIS tools for common Strava data analysis
- Finalize GIS tools for LTS models
- Final report and presentation to NH DOT TAG
- Begin Walkability model research (to be discussed at Oct meeting)
- Gather and analyze LTS model feedback from web application

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Circumstances affecting project: Describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope, and budget, along with recommended solutions to those problems.

Laura Getts (GIS analyst) has graduated from PSU and is working in Colorado. She continues to be on the project as an hourly employee to complete the preparation of GIS Tools for Strava data analysis, the GIS Tools for manual count to Strava comparisons and help prepare the final report and presentation to NH DOT TAG. In addition, I have recruited Raegan Young (GIS certified undergraduate) to work with me on the Webmap application designed to gather feedback on the LTS modeled road bikeability ratings. In order to have enough time to gather and analyze the feedback from the web application, complete the user guides, and have time to receive and reply to feedback on manuscripts developed from this work, I request a no-cost extension through December 2018 (if possible).

Tasks (from Work Plan)	Planned % Complete	Actual % Complete
• Finalize GIS tools for common Strava data analysis	50%	50%
• Finalize GIS tools for manual count - Strava comparisons	50%	50%
• Final summary of Strava 2015 & 2016 data	70%	50%
• Final report & presentation to NH DOT TAG	50%	0%
• *Develop Web application to gather feedback on LTS model	50%	90%

* This task was not on the original task list for this project, but the TAG deemed it a valuable next step.